REMARKS

The Office Action dated January 08, 2007, has been received and its contents have been carefully noted. By this response, claim 7 is cancelled, and claims 1-5, and 8 have been amended to place the application in a better form for consideration. No new matter has been introduced. Meanwhile, Applicants provide the following comments in order to clarify what is presently set forth by Applicants' claimed invention and to clearly distinguish the present invention from the prior art cited by the Examiner. Claims 1-5, and 8 remain pending in the instant application.

Section 103 (a) Rejections

Independent claim 1 is rejected under 35 U.S.C. §103(a) as being unpatentable over Suga (US Pat. 6,418,102) in view of Ikeda (US Pat. 6,067,284). Applicants respectfully traverse this rejection.

The present application discloses an optical power calibration method for calibrating a writing power of an optical storage carrier player. As shown in Fig. 2, for example, the compact disc 34 from the inside to the outside sequentially includes a center 38, an inner power calibration area 40, a data storage area 46 where user data is to be recorded, and a last possible lead-out area 48 for storing ending information about the user's data on the compact disc 34.

Particularly, the last possible lead-out area 48 further includes an additional outer power calibration area 52. Note that enough length of the last possible lead-out area 48 is reserved for storing the ending information, and then the outer power calibration area 52 can utilize the rest of the lead-out area 48 for optical power calibration.

Then shown in Fig. 3, the data storage area 46 further has an inner area 46a and the outer area 46b. The writing location of the data is alternatively within the inner area 46a or the outer area 46b, and accordingly the optical power calibration process is

performed either in the inner power calibration area 40 or in the outer power calibration area 52. That is, when data is to be written in the inner area 46a, the optical power calibration process is performed in the inner power calibration area 40; when data is to be written in the outer area 46b, the optical power calibration process is performed in the outer power calibration area 52.

Claim 1 reads as follows:

> 1. An optical power calibration method for calibrating a writing power of an optical storage carrier player, the optical storage carrier player comprising an access device for writing data onto an optical storage carrier, the optical power calibration method comprising steps of:
>
> setting a first power calibration area located outside a center of the storage carrier;
>
> setting a data storage area located outside the first power calibration area;
>
> setting a last possible lead-out area located outside the data storage area and at the outermost edge of the storage carrier for storing ending information about data written on the optical storage carrier;
>
> setting a second power calibration area located within the last possible lead-out area, wherein the starting point of the last possible lead-out area and the starting point of the second power calibration area are disposed in a predetermined length to form a reserved area for storing ending information about data written on the optical storage carrier;
>
> providing data to be written in the data storage area;
>
> before writing the data in the data storage area, determining a writing condition of the data in the data storage area;
>
> determining whether the determined writing condition in the data storage area is within a predetermined condition or not, and according to the determining result to select one of the first power calibration area and the second power calibration area to perform an optical power calibration process to determine a calibrated writing power; and

> controlling the access device to write the data with the calibrated writing power in the data storage area with the calibrated writing power and writing the ending information in the reserved area.

As the Examiner can readily appreciate, independent claim 1 of the pending application requires (1) the second power calibration area located within the last possible lead-out area, (2) the starting point of the last possible lead-out area and the starting point of the second power calibration area are disposed in a predetermined length to form a reserved area, and (3) writing the ending information in the reserved area. Neither in Suga nor in Ikeda can Applicants find the corresponding teaching.

As acknowledged by the Examiner in Page 3 of Office Action, Suga does not disclose that the storing ending information of data and second power [calibration] area [is] located in last possible lead-out area. As shown in FIG. 3, Suga simply used the inner non-user area for power calibration, but failed to teach using the outer non-user area (particularly, the last possible lead-out area) for power calibration. In addition, Suga did not teach a reserved area between the power calibration area and the user data storage area.

In the Office Action, the Examiner also cited Ikeda to reject claim 1. In col. 18, lines 4-26, Ikeda disclosed that a non-user area 236 on the inner side or a non-user area 238 on the outer side for a user area 234 is allocated to a power adjusting area. However, Ikeda neither discloses the reserved area for ending information or the other aforementioned features of the present application.

Those skilled in the art should know that, provided for ending information of data, the last possible lead-out area mentioned in the present invention is a specific area among the non-user areas (i.e., among areas other than the area for recording user data). Compared with Ikeda, the present invention adopts this last possible lead-out area among the non-user areas, and even more specifically, the beginning of the last possible lead-out area 48 is reserved for ending information, and only the rest is adopted for power calibration, as clearly shown in Fig. 2. Ikeda is different from the

present invention at least in a way shown in FIGs. 18A and 18B, that test writing tracks T1, T2, T3, T4, etc. within the non-user area 238 are disposed from the outside toward the inside of the disc, until the boundary between the non-user area 238 and the user area 234. When the power calibrations are performed even more times, at last the test writing tracks will occupy the beginning of the non-user area 238. Thus there is no area reserved for ending information in Ikeda's teaching.

Then note that the independent claim 1 of the pending application requires a determining step of "determining whether the determined writing condition in the data storage area is within a predetermined condition or not", and then a selecting step of "according to the determining result to select one of the first power calibration area and the second power calibration area to perform an optical power calibration process to determine a calibrated writing power."

According to the Office Action, Suga taught the determining step and the selecting step of the present invention. In col. 3, line 46 to col. 4, line 20 pointed out by the Examiner, Suga disclosed an optimum laser power calibration includes the steps of instructing, rotating, performing, detecting, reading, selecting (an optimum asymmetry value), and determining (an optimum recording laser power). However, Applicants find no step of Suga provided for determining whether the determined writing condition in the data storage area is within a predetermined condition or not, nor for selecting specific one from two distinct power calibration areas to perform an optical power calibration process to determine a calibrated writing power.

Then in col. 7, line 36 to col. 8, line 13 mentioned in the Office Action, Suga taught a structure of a data recordable area formed on the optical disk 200 and an exemplary operation for determining a preferred amount of laser light based on the optimum recording laser power. But Applicants find nothing in the description disclose the determining step and the selecting step of the present application. Applicants believe the Examiner might have misunderstood the teaching of Suga.

For these reasons, Applicants submit that the cited references will not support a 103(a) rejection and request that the rejection be withdrawn, because Suga and Ikeda neither teach or suggest all the limitations of claim 1, nor provide a motivation or reason for making the changes.

In addition to the forgoing arguments, Applicants submit a dependent claim should be considered allowable when its parent claim is allowed. Accordingly, provided the independent claim 1 is allowed, claims 2-5, and 8, which include all the limitations of claim 1 should be allowed.

CONCLUSIONS

In light of the above remarks, Applicants respectfully submit that all pending claims 1-5, and 8 are in condition for allowance, and respectfully request the withdrawal of the rejections. Accordingly, a Notice of Allowance is respectfully requested.

Respectfully submitted,

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By: _____

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